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Tilak M. Shah

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INTELLECTUAL PROPERTY / TECHNOLOGY LAW

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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/815,282  
Filing Date: April 01, 2004  
Appellant(s): SHAH, TILAK M.

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Vincent Gustafson  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 3/20/2008 appealing from the Office action mailed 12/19/2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 74-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Connors et al. (US Pat. 6,976,950).

Connors discloses an attenuation device. In one embodiment, the attenuation device comprises an inflatable container 68 having a generally circular profile (see Fig. 5), and a spherical configuration. The diameter of the inflatable container is 0.25-6 inches, or 1-3 inches, significantly overlapping the instantly claimed range (see col. 11, ln. 6-17). The inflatable container comprises a flexible wall 70 having first and second components 74, 76, bonding together by seam 78 (see col. 11, ln. 27-40). In this embodiment, Connors teaches the wall of the balloon to have multiple sheets of polyurethane (see paragraph bridging col. 12-13). However, the reference does not teach the wall of the balloon to have the presently claimed layers.

In another embodiment (see Fig. 16C), Connors teaches a balloon that is non-pillowed and spheroidal in shape; the wall of the device comprising at least one gas barrier layer and at least one moisture barrier layer. The gas barrier layer comprises polyvinylidene chloride or ethyl vinyl alcohol. The moisture barrier layer comprises polyurethane (see col. 23, ln. 1-20). The overall thickness of the wall is no more than 0.003 inches (3.0 mil). The polyurethane layer is about 0.0025-0.025 inches (0.0635-0.635 mm), and the polyvinylidene chloride layer is about 5-20 microns thick (see col. 23, ln. 44-54), significantly overlapping the presently claimed ranges.

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A tie layer is also disposed between the gas barrier layer and the moisture barrier layer (see col. 23, ln. 54-61).

Therefore, it would have been obvious to one of ordinary skill in the art to have employed the multilayers in the embodiment of Fig. 16 in the balloon of Fig. 5, for the purpose of enhancing flexibility, moisture barrier, gas barrier, and high impact strength.

The interior cavity 72 of the inflatable container contains a compressible media, such as gas (see col. 11, ln. 41-44). The compressible media include compositions that generate gas in the presence of water. One example would be sodium carbonate generating carbon dioxide (see col. 32, ln. 28-43).

Note that although the reference does not teach vacuum thermoforming, it has been within the skill in the art that process limitations would have insignificant patentable weight in an article claim.

#### **(10) Response to Argument**

Applicant's arguments filed in the Appeal Brief of 3/20/2008 have been fully considered but they are not persuasive.

The main focus of Applicant' arguments throughout the Appeal Brief is on the shape of the balloon.

Applicant alleges that although Connors makes passing mention to a spherically-shaped balloon, and Connors does disclose certain non-sheet-based methods suitable for forming spherical balloons, one skill in the art would understand that not every balloon fabrication method mentioned by Connors is compatible with every particular balloon shape that is mentioned by Connors.

It is first noted that nevertheless the reference does teach a spherically-shaped balloon. Applicant's attention is directed to Fig. 16C in Connors in particular. In this Figure, the balloon in Connors is clearly non-pillowed and spheroidal as presently claimed. With respect to the argument that Connors does not teach a vacuum thermoforming process that would form a non-pillowed and spheroidal balloon, it is noted that process limitations would have insignificant patentable weight in an article claim as long as the article has the same shape.

In response to Applicant's argument that Connors teaches away from a non-pillowed and spheroidal balloon, it is first noted that nevertheless the reference discloses the claimed shape of the balloon. Moreover, Figure 16C in the reference does include a balloon of the presently claimed shape.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Connors, therefore, would be obvious over the presently claimed invention.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

/Thao T. Tran/

Primary Examiner, Art Unit 1794

June 5, 2008

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